# installation tools

Site installation of thermoplastic pipework is straightforward and can usually be completed in a fraction of the time taken to install metallic systems.

PVC-U, PVC-C and ABS systems can all be joined together using a cold solvent welded method which requires no specialised equipment. Polypropylene, Polyethylene and PVDF are resistant to most organic solvents, however, and require heat to weld the material.

Regardless of the choice of material, installation time and efficiency is greatly improved by using the correct tool for the job. In this section we include tools for cutting, chamfering and joining plastic pipes from the extensive Reed Tools range.

Also included is a selection from the WIDOS range of socket fusion welding machines, and from the GAWAPLAST range of butt fusion welding machines. This equipment is available both for sale and hire.

For jointing High Purity PVDF, AGRU offer a range of technically advanced welding equipment designed to ensure cleanliness and consistency.

Detailed installation instructions for all systems are freely available on request. Where required, we are delighted to provide training, either on or off site.

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## pipe tools

# Reed pipe tools and vises





Reed have been producing fine tools for professional craftsmen since 1896. Reed engineers have developed many of the most innovative and effective tools in the industry such as the quick release tubing cutter, the hinged cutter, the rotary cutter, and recently, the universal pipe cutter. Many of these tools have been copied by others, but through continuous improvements and dedication to quality workmanship, Reed products remain the finest in the world.

The selection of Reed products shown here are suitable for a wide variety of plastic piping products, and are taken from their comprehensive range for all pipework materials. Please enquire for details on the complete Reed range.

### **Strap Wrenches**

✓ Strong grip without scratching or deforming pipe
 ✓ Coated polyester strap is far superior to cheaper

 Coated polyester strap is far superior to cheaper cotton straps

| Pipe Capacity O.D. (mm) | Code  | Price  |
|-------------------------|-------|--------|
| 10-63                   | 02248 | 47.18  |
| 33-127                  | 02249 | 93.31  |
| 60-324                  | 02250 | 117.98 |



### **Cutting Shears**

- Ratchet operation
- Smooth, one hand use
- Larger shears have long handle for added leverage
- Suitable for rigid and flexible PVC-U, ABS, PP, PB and PF

| Max. Pipe O.D. (mm) | Code   | Price  |
|---------------------|--------|--------|
| 42                  | 04176  | 98.11  |
| 42                  | 04175* | 113.87 |
| 63                  | 04177  | 188.95 |

<sup>\*</sup> Stainless steel blade



### **Plastic Pipe Saws**

- ✓ Tooth design, set and hardness specially designed for plastic
- Simultaneous forward and backward cutting
- Replaceable blades

| Max. Pipe O.D. (mm)     | Code  | Price |
|-------------------------|-------|-------|
| 150                     | 04720 | 46.01 |
| 200                     | 04724 | 48.21 |
| Replacement blade (150) | 94720 | 21.07 |
| Replacement blade (200) | 94724 | 22.17 |



### **Quick Release Cutters**

Cutter wheels for a variety of materials

Easy cutter wheel replacement

| Pipe o.d. | Code  | Wheel   | Material cut     | Price  |
|-----------|-------|---------|------------------|--------|
| 3-33      | 04110 | OP2     | PE/PB/ABS        | 70.63  |
| 3-33      | 04114 | 1-2 PVC | PVC-U/PVC-C      | 69.01  |
| 6-63      | 04120 | OP2     | PE/PB/ABS        | 120.44 |
| 6-63      | 04124 | 1-2PVC  | PVC-U/PVC-C      | 118.30 |
| 10-90     | 04130 | 30-40P  | PE/PB/ABS        | 151.66 |
| 10-90     | 04134 | 3-6 PVC | PVC-U/PVC-C      | 145.90 |
| 48-114    | 04140 | 30-40P  | PE/PB/ABS        | 175.80 |
| 48-114    | 04144 | 3-6 PVC | PVC-U/PVC-C      | 170.89 |
| 63-125    | 04150 | 30-40P  | PE/PB/ABS        | 197.99 |
| 102-168   | 04160 | 30-40P  | PE/PB/ABS        | 222.65 |
| 102-168   | 04164 | 3-6 PVC | PVC-U/PVC-C      | 216.91 |
| 102-168   | 04125 | 680PVC  | PVC-U HEAVY WALL | 216.91 |
| 159-254   | 04170 | 8OP     | PE/PVC-U/PVC-C   | 729.54 |



Spare cutter wheels available on request

### **Large Diameter Pipe Cutters**

- Excellent for in trench or above ground cutting Only 150mm-200mm clearance around the pipe required
- Outboard rollers keep cut square
- Long lasting carbide-tipped blades will cut up to 50mm wall

| Max. Pipe O.D. | Code  | Price   |
|----------------|-------|---------|
| 111-241        | 04465 | 1220.81 |
| 160-315        | 04470 | 1322.69 |
| 355-500        | 04475 | 1869.81 |
| 355-630        | 04480 | 2075.20 |
| 355-800        | 04485 | 2257.59 |



### **Bevellers**

- Aluminium frame
- ✓ Long tool life
- ✓ Adjustable for pipe size with no part changes
- ✓ Produces smooth 15° bevel

| Pipe O.D. | Code  | Price  |
|-----------|-------|--------|
| 40-200    | 04395 | 274.39 |
| 40-300    | 04398 | 442.81 |



### **Deburring Tools**

- DEB 0 removes internal and external burrs on all size pipes
- DEB 1 chamfers and deburrs pipe
- DEB 2 deburrs inner and outer edges of pipe
- DEB 3 removes internal and external burrs on all size pipes
- ✓ DEB 4 chamfers and deburrs pipe

| Type  | Pipe Size                             | Code  | Price  |
|-------|---------------------------------------|-------|--------|
| DEB 0 | All                                   | 04434 | 8.46   |
| DEB 1 | 1/2" 3/4" & 1"                        | 04650 | 101.99 |
| DEB 2 | Up to 2"                              | 04436 | 26.80  |
| DEB 3 | All                                   | 04437 | 19.38  |
| DEB 4 | 1 <sup>1</sup> / <sub>4</sub> " to 4" | 04430 | 91.88  |



## pipe tools

### **Tristands**

Lightweight for easy portability

✓ Large top tray with bending slots

Double faced jaws give twice the length of service

Heavy gauge steel and special design for stability

Special version (R405P) for plastic pipes

✓ Also available for clean room use

| Catalogue No. | Item Code | Vice Style | Pipe Capacity (mm) | Folded Length (mm) | Weight kg | Price  |
|---------------|-----------|------------|--------------------|--------------------|-----------|--------|
| R450+         | 02306T    | Chain      | 10-178             | 1118               | 16        | 705.72 |
| R450P         | 04457     | Chain      | 10-178             | 1118               | 16        | 742.68 |
| R450C         | 04458     | Chain      | 10-178             | 1118               | 16        | 776.36 |
| R450GB        | 02307     | Chain      | 10-114             | 1118               | 13        | 612.76 |
| R450E         | 02308     | -          | 178 max.           | 1118               | 15        | 718.60 |
| R40+v         | 02311     | Yoke       | 10-75              | 1295               | 18        | 695.27 |

### **More About Tristands**

R450+: two sided jaws for up to 6" metal pipe R450P: for plastic pipe up to 6"; one side of jaw for

metal, one side for plastic pipe

R450C:

410 stainless steel jaws, with rubber on one side; anodized (not painted) aluminium base;

clear polymer sliptube over chain; good for clean room use

R450GB: aluminium legs for weight critical field uses; up

to 4" pipe capacity

R450E: European style portable workbench with

multiple vise options; user to mount vise in

cast holes and slots

R40+: two sided lower jaw for up to 21/2 metal pipe;

yoke vise for holding work tightness of all

these TriStand models.











R450+



### **Chain Vises**

Dual purpose jaws to hold metal and plastic pipes

Jaws easily rotated to different positions

✓ Ideal for bench mounting or to fit to Reed Tristand

| Pipe Capacity O.D. (mm | n) Code | Price  |
|------------------------|---------|--------|
| 10-75                  | 04450   | 173.37 |
| 10-114                 | 04452   | 299.87 |
| 10-178                 | 04457*  | 742.68 |

<sup>\*</sup> Complete with Tristand



### **Field Pipe Vises**

√ Holds pipe up to 20" (500mm) diameter

✓ Lightweight (10kg without legs).

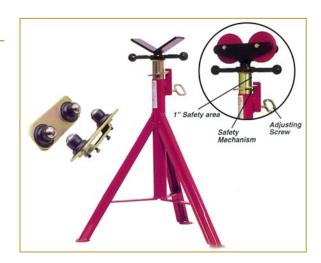
| Pipe O.D. (mm) | Code  | Price  |
|----------------|-------|--------|
| 50-500         | 06027 | 803.48 |

Tubular legs and backbone must be ordered separately.



### **Pipe Jacks**

- ✓ Adjustable screw and hardened steel locking ring
- ✓ Large 907kg weight capacity
- Roller head jack has extra wide bearing for greater strength and tool life
- ✓ Pipe capacity up to 24" (610mm).



| Code  | Description           | Pipe Capacity (mm) | Height adj. | Price  |
|-------|-----------------------|--------------------|-------------|--------|
| 06350 | V-Head High Jack      | up to 610          | 610-1190    | 156.60 |
| 06352 | Roller Head High Jack | up to 610          | 610-119     | 144.92 |
| 06351 | Ball Transfer Head    | 10-300             | -           | 188.95 |
|       | Attachment (Pair)     |                    |             |        |



**Free Training** 

We can provide free installer training either on site or at our bespoke training facility.

Contact Tony Charlton or Tom Tate on:

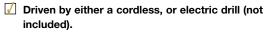
0800 975 79 71



## pipe tools

### **Reed Test Pump**





- 1500 RPM drill recommended; pump range 300 2000 rpm
- Ideal for testing commercial and domestic water systems.
- Complete with a 4.5 meter High Pressure Output Hose with quick disconnect coupling. Output pressure can be adjusted easily from 0-34 bar.
- Only 3.9 kg in weight, this compact pump is easily handled and transported.



| Code  | Price  |
|-------|--------|
| 08177 | 522.45 |

### **Pipe Tec Plastic Pipe Joiner**



- Quick and easy to use
- Lightweight
- Positive grip will not crush, crack or notch plastic pipe
- Unique centre-line function assures proper alignment
- Allows pipe to fully penetrate fitting
- Will hold freshly cemented joints while curing
- ✓ For inch pipes in sizes 4" to 18", and metric 50mm to 150mm
- ✓ All necessary attachments included

| Pipe Size    | Code  | Price   |
|--------------|-------|---------|
| 4" - 12"     | P0412 | 1979.70 |
| 14" - 18"    | P1418 | 4036.37 |
| 50mm - 150mm | P5150 | 1530.94 |

### **Exact Pipe Cutters**

The fastest, easiest and safest way to cut plastic pipes.

The innovative new Exact Pipecutting System essentially resolves all the problems associated with pipe cutting.

#### A finished surface ready for installation

Exact PipeCut attaches to a pipe firmly. After attachment, the blade is automatically in the correct position and does not need to be guided. The blade chips through the pipe rather than grinding it. This creates burr-free surfaces that are ready for jointing.

#### Superior work comfort

The entire weight of Exact PipeCut rests on the pipe being cut, so using it is easy and safe, even in tight spaces. Only about a metre of working room is required. Heavy pipes need not be lifted onto a work table, but can be cut at floor level. During operation, the saw is firmly attached to the pipe and cannot work itself loose from the operator's grasp. Nor does it need to be supported or guided. Cutting small-diameter pipes to size is effortless and quick on a work table, too.

#### **Complete System**

Each Exact PipeCut System is supplied complete with:

- PipeCut Machine
- Blade
- System Carry Case Holdall
- Set of Pipe Support Rollers
- Allen Keys
- DVD User Manual & Booklet





#### **Exact PipeCut 170 technical specifications:**

Voltage 110V / 50 HZ
Power input 1010W
Unloaded speed 4000 rpm
Periodic operation S3 25%
Blade diameter 140mm
Arbor hole 62mm
Weight 5.7kg

Cutting range 15mm - 170mm Maximum thickness Plastics: 14mm



#### Exact PipeCut 280E technical specifications:

**Voltage** 110 and 230V / 50-60Hz

Power input 1750W

Unloaded speed 1-2000 rpm, 2-3900 rpm

Periodic operation 2.5 min ON / 7.5 min OFF (S3 25%)

Blade diameter 160mm Arbor hole 62mm Weight 9.0kg

Cutting range 40mm - 280mm

Maximum thickness 38mm



#### **Exact PipeCut P400 technical specifications:**

**Voltage** 110 and 230V / 50-60Hz

Power input 1010W Unloaded speed 4000 rpm

Periodic operation 2.5 min ON / 7.5 min OFF (S3 25%)

Blade diameter 150mm Arbor hole 62mm Weight 6.0kg

Cutting range 150mm - 400mm

Maximum thickness 25mm

| Exact PipeCut Model        | Pipe Diameter<br>Cutting Range | Max Pipe Wall<br>Thickness - Plastic | Price   |
|----------------------------|--------------------------------|--------------------------------------|---------|
| Exact PipeCut System 170   | 15 - 170mm                     | 14mm                                 | 993.72  |
| Exact PipeCut System 280E* | 40 - 280mm                     | 38mm                                 | 1988.81 |
| Exact PipeCut System P400  | 100 - 400mm                    | 25mm                                 | 1603.88 |







<sup>\*</sup> Electronic, variable speed motor

# repairs and solvent welding

# Stop It® pipe repair system





This in-field repair system can be quickly applied without any tools, and cures hard in 30 minutes. It works on all metal and plastic lines and when cured has excellent chemical and abrasion resistance. Each kit contains a hand-mouldable epoxy to plug leaks, voids or cracks, and a water-activated repair tape to wrap and add strength to the seal.













After 30 minutes cure will withstand up to 27 bar!

Leaking Joint

Roughens surface Apply FixStix™ A

Stop It® Pipe Repair System



- Repairs all metal or plastic pipes
- **✓** Fully cures in 30 minutes
- Can be applied underwater
- Pipe does not have to be clean or dry
- Excellent chemical resistance
- After cure, will withstand up to 27 bar pressure
- Complete kit including gloves

| Size of Tape       | Code     | Price |
|--------------------|----------|-------|
| 2" wide x 4' long  | STOP-240 | 40.27 |
| 2" wide x 12' long | STOP-212 | 59.23 |

### Stop It® Product Selection Guide

| Pipe Si           | ze              | Quantity 2" >                      | k 4'                               | Quantity 2" X 12'                  |                                    |
|-------------------|-----------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Nominal Inch Size | O.D.<br>mm Size | Is Your Pressure<br>Below 100 psi? | Is Your Pressure<br>Above 100 psi? | Is Your Pressure<br>Below 100 psi? | Is Your Pressure<br>Above 100 psi? |
| 1/2"              | 20              | 1 roll                             | 1 roll                             | Use smaller size                   | Use smaller size                   |
| 3/4"              | 25              | 1 roll                             | 2 rolls                            | Use smaller size                   | Use smaller size                   |
| 1"                | 32              | 1 roll                             | 2 rolls                            | Use smaller size                   | Use smaller size                   |
| <b>1</b> -1/4"    | 40              | 1 roll                             | 2 rolls                            | Use smaller size                   | Use smaller size                   |
| <b>1-</b> 1/2"    | 50              | 2 rolls                            | 2 rolls                            | Use smaller size                   | Use smaller size                   |
| 2"                | 63              | 2 rolls                            | Use larger size                    | 1 roll                             | 1 roll                             |
| 2-1/2"            | 75              | 2 rolls                            | Use larger size                    | 1 roll                             | 1 roll                             |
| 3"                | 90              | 2 rolls                            | Use larger size                    | 2 rolls                            | 2 rolls                            |
| 3-1/2"            | -               | Use larger size                    | Use larger size                    | 2 rolls                            | 2 rolls                            |
| 4"                | 110             | Use larger size                    | Use larger size                    | 2 rolls                            | 3 rolls                            |
| 5"                | 140             | Use larger size                    | Use larger size                    | 2 rolls                            | 3 rolls                            |
| 6"                | 160             | Use larger size                    | Use larger size                    | 2 rolls                            | 3 rolls                            |
| 8"                | 225             | Use larger size                    | Use larger size                    | 3 rolls                            | 4 rolls                            |
| 10"               | 280             | Use larger size                    | Use larger size                    | 4 rolls                            | 5 rolls                            |
| 12"               | 315             | Use larger size                    | Use larger size                    | 4 rolls                            | 5 rolls                            |
| 14"               | 355             | Use larger size                    | Use larger size                    | 5 rolls                            | 6 rolls                            |
| 16"               | 400             | Use larger size                    | Use larger size                    | 5 rolls                            | 7 rolls                            |
| 18"               | 450             | Use larger size                    | Use larger size                    | 6 rolls                            | 8 rolls                            |

## solvent welding products

All WELD-ON cements, primers and cleaning fluids are now LOW VOC



IPS Corporation produces a wide range of high strength WELD-ON® solvent cements for rigid and flexible plastic pipes and fittings. Our stock range includes cements for PVC-U and Corzan PVC-C, as well as applicators to ensure faster, better joints.

#### **PVC-U Solvent Cements**



### 719™

Extra heavy bodied, slow setting, PVC cement for all classes and schedules up to 30" diameter. It is a good fabrication cement, as it has excellent gap filling properties and because of its slow set, a good cement on large diameter pipe. 719-300 for 473ml tin Price: £19.35



## 919XG Cement<sup>™</sup> NEW!

New THF free formulation. Extra heavy bodied, slow setting, PVC cement for all classes and schedules up to 30" diameter. It has excellent gap filling properties and because of its slow set, a good cement on large diameter pipe.

919XG-300 for 473ml tin Price: £19.35



### 725<sup>™</sup> Wet 'R Dry<sup>™</sup>

Medium bodied, extremely fast setting, PVC cement for all classes and schedules up to 3" diameter interference fit. Specially formulated for applications where conditions are very wet and/or when quick pressurization is desired. 725-300 for 473ml tin Price: £18.45

725-400 for 240ml tin Price: £10.84

#### **PVC-C Solvent Cements**



#### 724<sup>TM</sup>

Heavy bodied, medium setting, Corzan PVC-C cement for all classes and schedules up to 12" diameter. Formulated for improved chemical resistance to caustics including hypochlorite solutions. May be used on PVC industrial piping systems

for chemical applications.

Approved for Corzan™ Systems.
724-301 for 473ml tin Price: £23.76 724-201 for Quart tin Price: £42.75

#### **PVC-U** and **PVC-C** Primers



### P-70<sup>™</sup> Primer

P-70 is the most aggressive PVC and CPVC primer commercially available. Excellent product for cold weather applications. If use properly P-70 will soften pipe and fitting surfaces which is necessary for the proper solvent welding of the materials.

770-300 for Pint tin Price: £18.45 770-200 for Quart tin Price: £29.62

### **Jointing Applicators and Accessories**



### 3020

Roll-A-Weld 3" roller for pipe diameters from 3" through 6"; fits MT-653 empty quart can. Price: £15.79



### 6020

Roll-A-Weld 4" roller for pipe diameters from 3" through 8"; fits standard quart can as well as MT-651 empty quart can. Price: £15.52



#### 7020

Jumbo Roll-A-Weld 7" roller for pipe diameters of 6" or larger; fits MT-648 gallon can and cements available in wide mouth cans. Price: £19.35



#### 4020

and cements available in wide mouth

Price: £19.35



#### Can-Mate Daubers

Adjustable plastic applicator with telescoping stem to fit all cans (except 1/4 pint). Available in 1/2", 3/4" and 11/2" dauber sizes.

CM-50 for <sup>1</sup>/<sub>2</sub>"-1" pipe CM-75 for <sup>3</sup>/<sub>4</sub>"-1<sup>1</sup>/<sub>4</sub>" pipe CM-150 for 1<sup>1</sup>/<sub>2</sub>"-3" pipe Price: £5.24



#### **Brushes**

PB-1: Plastic Handle Brush: fits standard pint and quart cans. Price: £8.72

CM BCP Can-Mate®: Adjustable Plastic Handle, Natural Bristle Brush; fits standard pint and quart cans. Price: £9.48



4" swab for pipe diameters of 6" or larger; fits MT-648 empty gallon can



### 5020

4" swab for pipe diameters from 3" through 8"; fits standard quart can as well as MT-651 empty quart can. Price: £15.52



### **Empty Metal Cans**

Available in MT-648 gallon, MT-651 quart, MT-653 quart (paint type) and

MT-654 pint sizes. MT-648 Price: £18.45 MT-651 Price: £5.74 MT-653 Price: £9.64 MT-654 Price: £4.80

# welding torches



### **Duratherm Hand-Held Welding Tool**

- For use with external air supply (eg. DT6 or DT14)
- Compact and lightweight
- Continuous adjustment of welding temperature without changing air volume (Acc. DVS 2208)
- ☑ Built-in electronic temperature controls
- ✓ Automatic low air protection
- ✓ Air and electrical supply in one hose
- ✓ Fully rotating handle including nozzle

The Wegener Duratherm hot air welding tool is compact and easy to use, weighing 450 grams. It is for use with an external air supply.

It can be ordered with either 4m or 8m long hose.



Duratherm

| Item  | Code  | Price   |
|---|-------|---------|
| Duratherm with 4m hose                                    | 10816 | 342.96  |
| Duratherm with 8m hose                                    | 10817 | 352.35  |
| Heating element HEd 1000W                                 | 11858 | 52.25   |
| Portable blower DT 4 (one connection)                     | 15857 | 882.88  |
| Portable blower DT 6 (two connections)                    | 10825 | 1069.12 |
| Portable blower DT 6L (two connection + air volume guage) | 10826 | 1244.62 |
| Workshop blower WEG AB60 (one connection)                 | 24528 | 797.30  |
| Workshop blower WEG AB120L (two connections)              | 24530 | 1105.50 |
| Workshop blower DT 14 (six connections)                   | 10827 | 1738.98 |
| Wegener air volume gauge                                  | 11087 | 184.89  |
| Wegener digital temperature gauge including thermocouple  | 24644 | 273.29  |

### **Autotherm3 Hand-Held Welding Tool**

- Integrated temperature control, infinitely variable adjustment of the welding temperature
- Air and electricity supply in one hose package
- ✓ Hose connection points diagonaly downwards
- Handle including nozzle can be turned relative to the hose connection
- Safety cut out if air supply fails
- Heating element 1000W
- Available with 4m or 8m feeder hose

The Wegener hot gas welder with an external air supply combined with precision fans with a constant air flow are ideal for processing thermoplastics in the workshop or on site.



Autotherm3

| Item  | Code  | Price   |
|---|-------|---------|
| Autotherm 3 with 4m hose                                  | 25550 | 598.86  |
| Autotherm 3 with 8m hose                                  | 25551 | 608.23  |
| Heating element HEd 1000W                                 | 11858 | 52.25   |
| Portable blower DT 4 (one connection)                     | 15857 | 882.88  |
| Portable blower DT 6 (two connections)                    | 10825 | 1069.12 |
| Portable blower DT 6L (two connection + air volume guage) | 10826 | 1244.62 |
| Workshop blower WEG AB60 (one connection)                 | 24528 | 797.30  |
| Workshop blower WEG AB120L (two connections)              | 24530 | 1105.50 |
| Workshop blower DT 14 (six connections)                   | 10827 | 1738.98 |
| Wegener air volume gauge                                  | 11087 | 184.89  |
| Wegener digital temperature gauge including thermocouple  | 24644 | 273.29  |

See page 517 for details of welding nozzles

### **Exotherm & Airtherm Hand-Held Welding Tool**

- ✓ User friendly compact devices with slim design
- Self contained powerful air supply
- ✓ Integrated output control
- ✓ Heating element safety cut-out
- **Exotherm:** integrated temperature control, infinitely variable adjustment of the welding temperature via push button
- √ Temperature range up to 600°C

The Wegener Exotherm and Airtherm hand-held welding tools with their self contained air supply and integrated fans are ideal for workshop and site work.



Airtherm 1600

Airtherm 3000

| Item   | Code  | Price  |
|--|-------|--------|
| Airtherm 1600                                | 18283 | 265.27 |
| 20mm Wide slot nozzle for Airtherm 1600      | 18397 | 33.51  |
| 40mm Wide slot nozzle for Airtherm 1600      | 18398 | 33.51  |
| 5mm Round nozzle for Airtherm 1600           | 18400 | 33.51  |
| Triple nozzle for Airtherm 1600              | 18401 | 33.51  |
| Nozzle adaptor for Airtherm 1600             | 19504 | 38.19  |
| Airtherm 3000                                | 18284 | 320.20 |
| 75 x 2mm Wide slot nozzle for Airtherm 3000  | 18403 | 50.91  |
| 70 x 10mm Wide slot nozzle for airtherm 3000 | 18402 | 37.51  |
| Exotherm 230v                                | 25555 | 655.26 |
| Exotherm 120v                                | 25556 | 655.26 |



Exotherm

### **Duratherm SC Hand-Held Welding Tool**

- Intergral high volume air supply
- ✓ Compact and lightweight
- ✓ Continuous adjustment of welding temperature without changing air volume (Acc. DVS 2208)
- ▼ Built-in electronic temperature controls
- Automatic low air protection
- Hose connection to blower for ease of use

The Wegener Duratherm SC hot air welding tool has a seperate blower to reduce the weight of the hand-held welding tourch to approximately 450 grams, The compact, light weight of the tool combined with the 1.5 metre long hose allows greater freedom of movement for the operator.



Duratherm SC

| Item                      | Code  | Price  |
|---------------------------|-------|--------|
| Duratherm SC              | 10818 | 628.33 |
| Heating element HEd 1000W | 11858 | 52.25  |

### **Complete Welding Kit**

- Hot air welding tourch Duratherm or Autotherm3
- Spare heating element HEd
- ✓ One tacking nozzle HD, one round nozzle RD 4mm, one high speed welding nozzles SSD 4mm and one round brush for cleaning nozzles
- ✓ On-site blower DT6L, WEG AB120L or WEG AB60 including air volume gauge
- Carrying case

| Item                                      | Code  | Price   |
|---|-------|---------|
| Duratherm Kit with 4m hose & DT6L         | 10819 | 1673.32 |
| Duratherm Kit with 8m hose & DT6L         | 10820 | 1682.70 |
| Duratherm Kit with 4m hose & WEG AB 120L  | 25291 | 1534.30 |
| Duratherm Kit with 8m hose & WEG AB 120L  | 25292 | 1543.68 |
| Duratherm Kit with 4m hose & WEG AB60     | 25725 | 1266.10 |
| Duratherm Kit with 8m hose & WEG AB60     | 25726 | 1235.48 |
| Autotherm3 Kit with 4m hose & DT6L        | 25727 | 1927.87 |
| Autotherm3 Kit with 8m hose & DT6L        | 25728 | 1937.24 |
| Autotherm3 Kit with 4m hose & WEG AB 120L | 25293 | 1788.90 |
| Autotherm3 Kit with 8m hose & WEG AB 120L | 25294 | 1409.10 |
| Autotherm3 Kit with 4m hose & WEG AB60    | 25723 | 1160.25 |
| Autotherm3 Kit with 8m hose & WEG AB60    | 25724 | 1490.08 |

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### extrusion welders & air blowers

#### **Hand Held Extrusion Welders**

Wegener's extrusion welders combine a very compact and lightweight design with a high welding performance and excellent quality of the extrudate. All extruders in the Wegener EXWELD 2 series have an 3-zone extrusion screw and patented thermal isolation of the extruder from the drive. A rapid microprocessor based control system regulates the extrudate and air temperature, as well as the main drive.

The Wegener EXWELD 2 series features a modular design which allows users to perform minor maintenance and service work themselves. Even demanding materials such as CPVC can be easily processed with the corresponding PVC extruder version.

- Wegener microprocessor control system for air and extrudate temperature and to control the motor
- Own air supply in the SC version through a Wegener Airtherm 2200W with seperate control of air temperature
- ✓ Switch between actual and target value display
- Cold start protection



EXWELD alpha2 SC



EXWELD sigma2 SC

| Model            | Code  | Welding Capacity | Weight | Price   |
|------------------|-------|------------------|--------|---------|
| EXWELD sigma2 SC | 22674 | up to 1.9kg/h    | 6.3kg  | 3999.90 |
| EXWELD sigma2 EC | 23170 | up to 1.9kg/h    | 5.3kg* | 3999.90 |
| EXWELD alpha2 SC | 20354 | up to 2.6kg/h    | 7.0kg  | 5339.90 |
| EXWELD alpha2 EC | 20249 | up to 2.6kg/h    | 5.9kg* | 5339.90 |
| EXWELD beta2 SC  | 20356 | up to 4.6kg/h    | 9.9kg  | 6362.32 |
| EXWELD beta2 EC  | 20253 | up to 4.6kg/h    | 8.9kg* | 6362.32 |
| EXWELD gamma2 EC | 20357 | up to 6.2kg/h    | 9.2kg* | 5628.00 |

<sup>\*</sup> without input lead (cable)

### **Blower DT4**

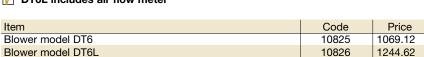
- For use with one welding torch
- √ 0.4 Bar / up to 60 I/min
- 🚺 0.35 kW A.C.motor
- 🚺 230v
- 🚺 Low operating noise
- Weight approximately 7.5 kg



| Item             | Code  | Price  |
|------------------|-------|--------|
| Blower model DT4 | 15857 | 882.88 |

### Blower DT6 & DT6L

- For use with two welding torch
- √ 0.6 Bar / up to 2x60 l/min
- 0.35 kW A.C.motor
- **230v**
- Low operating noise
- Ideal for long air supply hoses
- Weight approximately 9.5 kg
- ✓ DT6L includes air flow meter





### **Tacking Nozzle**



| Item           | Code  | Price |
|----------------|-------|-------|
| Tacking nozzle | 10187 | 42.87 |

### **Round Nozzle**



| Item         | Code  | Price |
|--------------|-------|-------|
| Round nozzle | 10186 | 21.44 |

### **Speed Welding Nozzle (Round)**



| Item                                       | Code  | Price  |
|--|-------|--------|
| SSD 3 for 3mm round wire                   | 10175 | 87.09  |
| SSD 4 for 4mm round wire                   | 10176 | 87.09  |
| SSD 5 for 5mm round wire                   | 10177 | 87.09  |
| SSD 3 for 3mm round wire (45° angle right) | 22887 | 128.64 |
| SSD 3 for 3mm round wire (45° angle left)  | 22888 | 128.64 |
| SSD 4 for 4mm round wire (45° angle right) | 22889 | 128.64 |
| SSD 4 for 4mm round wire (45° angle left)  | 22890 | 128.64 |

### **Speed Welding Nozzle (Profile)**



| Item                                    | Code  | Price  |
|---|-------|--------|
| SSD/Prof 3x3x4 for profile wire 90-4    | 11001 | 128.61 |
| SSD/Prof 3x3x5 for profile wire 80/90-5 | 11002 | 128.61 |
| SSD/Prof 4x4x6 for profile wire 80/90-6 | 11003 | 128.61 |
| SSD/Prof 5x5x6 for profile wire         | 11004 | 128.61 |
| SSD/Prof 5x5x7 for profile wire 80/90-7 | 11005 | 128.61 |
| SSD/Prof 6x6x8 for profile wire 90-8    | 11006 | 128.61 |
| SSD/Prof 7x7x7 for profile wire 60-7    | 11007 | 128.61 |
| SSD/Prof B&M rod with reinforced lip    | 18155 | 139.36 |

### **Speed Welding Nozzle with Tacking Tip**



| Item  | Code  | Price  |
|---|-------|--------|
| SSD/HD 3 for 3mm round wire                   | 10173 | 112.53 |
| SSD/HD 4 for 4mm round wire                   | 10174 | 112.53 |
| SSD/HD 5 for 5mm round wire                   | 10181 | 112.53 |
| SSD/HD 6 for 6mm round wire                   | 11721 | 112.53 |
| SSD/HD 4 for 4mm round wire (45° angle right) | 22891 | 167.50 |
| SSD/HD 4 for 4mm round wire (45° angle left)  | 22892 | 167.50 |

### **Speed Welding Cast Nozzle**



| Item  | Code  | Price  |
|---|-------|--------|
| SSD 3C for 3mm round wire                     | 13020 | 87.09  |
| SSD 4C for 4mm round wire                     | 17346 | 87.09  |
| SSD 3C 3 for 3mm round wire (45° angle right) | 22893 | 100.80 |
| SSD 3C 3 for 3mm round wire (45° angle left)  | 22894 | 100.80 |
| SSD 4C 4 for 4mm round wire (45° angle right) | 22895 | 100.80 |
| SSD 4C 4 for 4mm round wire (45° angle left)  | 22896 | 100.80 |

# **Speed Welding Cast Nozzle with Tacking Tip**



| Item                         | Code  | Price  |
|------------------------------|-------|--------|
| SSD/HD 3C for 3mm round wire | 11716 | 112.53 |
| SSD/HD 4C for 4mm round wire | 11715 | 112.53 |
| SSD/HD 5C for 5mm round wire | 22323 | 132.66 |

### **Accessories**



| Item                      | Code  | Price  |
|---------------------------|-------|--------|
| Digital temperature gauge | 24644 | 273.29 |
| Air flow meter            | 11087 | 184.89 |

### hand-held fusion tools

#### **Hand-held Fusion Tools**

Suitable for PE, PP and PVDF

Portable and easy to use

Widos hand-held heating tools are round or rectangular in design. They include electronic or thermostatic temperature control (a digital display is optional for the electronic version). The electronic control also features temperature adjustment and control in accordance with DVS 2208.

Heating surfaces are PTFE coated. All tools have an on/off switch, a mains control lamp and a control lamp for heating intervals. A steel carry case or heat-protected box may be ordered for safe transport of the tools.

Special voltages and dimensions are also available on request.

**Round Hand-held Heating Tools** 

| Size         | Control      | Power        | Code      | Price  |
|--------------|--------------|--------------|-----------|--------|
| ≤ 90mm Dia.  | Thermostatic | 110v / 315w  | H0090T110 | 427.78 |
| ≤ 90mm Dia.  | Electronic   | 110v / 315w  | H0090E110 | 496.78 |
| ≤ 120mm Dia. | Thermostatic | 110v / 500w  | H0120T110 | 407.09 |
| ≤ 120mm Dia. | Electronic   | 110v / 500w  | H0120E110 | 563.01 |
| ≤ 200mm Dia. | Thermostatic | 110v / 800w  | H0200T110 | 545.07 |
| ≤ 200mm Dia. | Electronic   | 110v / 800w  | H0200E110 | 683.07 |
| ≤ 295mm Dia. | Thermostatic | 110v / 1500w | H0320T110 | 662.36 |
| ≤ 295mm Dia. | Electronic   | 110v / 1500w | H0320E110 | 793.45 |

**Square Hand-held Heating Tools** 

| Size          | Control      | Power        | Code       | Price  |
|---------------|--------------|--------------|------------|--------|
| 150mm x 150mm | Thermostatic | 110v / 750w  | H0150VT110 | 391.90 |
| 150mm x 150mm | Electronic   | 110v / 750w  | H0150VE110 | 478.83 |
| 250mm x 250mm | Thermostatic | 110v / 2000w | H0250VT110 | 637.53 |
| 250mm x 250mm | Electronic   | 110v / 2000w | H0250VE110 | 739.64 |









**Free Training** 

We can provide free installer training either on site or at our bespoke training facility.

Contact Tony Charlton or Tom Tate on:

0800 975 79 71



### hand-held socket fusion tools

### **Weld IT® Socket Fusion Tool**

Hand held welding tool

Suitable for PE, PB, PP and PVDF

Multiple connections possible on each tool

Socket fusion tool with electronic temperature control for use with socket fusion blocks up to 63mm. A digital temperature display with convenient buttons to set the temperature. The tool comes complete with vice support stand for use on site or in the workshop.

Everything is packed in a steel carrying case including spigot and socket heating blocks in sizes 20/25/32/40/50/63mm.

110V 50/60 Hz 1.7 kg

Maximum temperature: 260°C

Maximum temperature tolerance +/- 5°C



### **Socket Fusion Tool Complete**

| Size    | Control    | Power | Connections | Code        | Price  |
|---------|------------|-------|-------------|-------------|--------|
| 20-63mm | Electronic | 110v  | 2           | WELDIT 110V | 457.26 |

### **Spare Parts**

| opare i arts                    |                |             |        |
|---------------------------------|----------------|-------------|--------|
| Item                            | Size (O.D. mm) | Code        | Price  |
| Table clamp                     |                | HM001       | 40.04  |
| Heating block, non-stick coated | 16             | HD016S      | 28.98  |
| Heating block, non-stick coated | 20             | HD020S      | 30.36  |
| Heating block, non-stick coated | 25             | HD025S      | 33.12  |
| Heating block, non-stick coated | 32             | HD032S      | 52.43  |
| Heating block, non-stick coated | 40             | HD040S      | 59.34  |
| Heating block, non-stick coated | 50             | HD050S      | 63.47  |
| Heating block, non-stick coated | 63             | HD063S      | 75.89  |
| Peeling and chamfering tool     | 20             | 799.300.260 | 143.97 |
| Peeling and chamfering tool     | 25             | 799.300.270 | 143.97 |
| Peeling and chamfering tool     | 32             | 799.300.280 | 143.97 |
| Peeling and chamfering tool     | 40             | 799.300.290 | 198.35 |
| Peeling and chamfering tool     | 50             | 799.300.300 | 213.02 |
| Peeling and chamfering tool     | 63             | 799.300.310 | 242.41 |



Weld It Socket Fusion Tool Carrying Case



Digital Display



Weld It Socket Fusion Tool with Bench Stand



Bench Stand

# workshop socket fusion tools

### Type 7511 Workshop Socket Fusion Tool

✓ Suitable for PE, PB, PP and PVDF

Size range from 20mm O.D. to 75mm O.D.

The Widos Type 7511 socket fusion welding machine will weld piping systems made from PE, PB, PP or PVDF in sizes from 20mm O.D. up to 75mm O.D.

This machine has easy adjustment on both sides of the tool to ensure correct alignment. There are two clamps on the pipe side, whereas the fitting side has a single clamp plus an insertion stop. The insertion stop will control the entry of the pipe into the fitting.

The electronically controlled heating element (230V/630W) holds the anti-stick coated heating tools. A rack-and-pinion mechanism controls the opening and closing motion of the machine.



The Type 7511 is optionally available with 110v supply and with inch sized heater blocks.

### Type 3511 Workshop Socket Fusion Tool

**✓** Suitable for PE, PB, PP and PVDF

√ Type 3511 size range from 20mm O.D. to 110mm or 125mm O.D.

The Widos Type 3511 socket fusion welding machine will weld piping systems made from PE, PB, PP or PVDF in sizes from 20mm O.D. up to 110mm O.D., or up to 125mm O.D.

The machines are mounted on a solid frame and have easy adjustment on both sides of the tool to ensure correct alignment. There are two clamps on the pipe side, whereas the fitting side has a single clamp plus an insertion stop. The insertion stop will control the entry of the pipe into the fitting.

The electronically controlled heating element (230V/1100W) is in accordance with DVS 2208. It holds the anti-stick coated heating tools which may also be ordered in inch dimensions if required. It can also be removed from the prismatic mount and put into a table locking device for external use. A rack-and-pinion mechanism controls the opening and closing motion of the machine.



Special voltages are also available to order.

#### Socket Fusion Machines Type 7511, 3511

| Item  | Size (O.D. mm) | Code    | Price       |
|---|----------------|---------|-------------|
| Widos Type 7511 * (110v / 630w)                       | 20 - 75        | 3701110 |             |
| Steel carry case for Type 7511                        |                | TK0075  |             |
| Widos Type 3511 / OD110 * (110v / 1100w)              | 20 - 110       | 3720110 |             |
| Widos Type 3511 / OD125 * (110v / 1100w)              | 20 - 125       | 3740110 | on          |
| Transport and mounting case for Type 3511             |                | TK3500  | application |
|   |                |         |             |
| Packing (not required if transport case is purchased) |                | TV0955  |             |
| * Heating blocks not included                         |                |         |             |
|   |                |         |             |

#### **Accessories**

| Item                                    | Size (O.D. mm) | Code   | Price       |
|---|----------------|--------|-------------|
| Heating block, non-stick coated, grey * | 20             | HD020S |             |
| Heating block, non-stick coated, grey * | 25             | HD025S |             |
| Heating block, non-stick coated, grey * | 32             | HD032S |             |
| Heating block, non-stick coated, grey * | 40             | HD040S |             |
| Heating block, non-stick coated, grey * | 50             | HD050S |             |
| Heating block, non-stick coated, grey * | 63             | HD063S |             |
| Heating block, non-stick coated, grey * | 75             | HD075S | on          |
| Heating block, non-stick coated, grey * | 90             | HD090S | application |
| Heating block, non-stick coated, grey * | 110            | HD110S | app         |
| Heating block, non-stick coated, grey * | 125            | HD125S |             |
| Heating block, non-stick coated, grey * | 140            | HD140S |             |
| * Available inch sizes on request       |                |        |             |

# workshop combined socket fusion and butt fusion tools

### SG160 Workshop Combined Socket and Butt Fusion Tool

**Butt Fusion Welding** 

**Socket Fusion Welding** 

Suitable for PE, PP and PVDF

**✓** Suitable for PE, PB, PP and PVDF

Sizes from 32mm to 160mm

Sizes from 16mm to 110mm

The SG160 combined socket and butt fusion tool is a convenient and compact workshop or site tool providing versatile options for use.

As a butt fusion tool it includes motorized parallel planing of the pipe ends, and a heating element with exchangeable PTFE cover sheets. When used for socket fusion welding, it features motorized peeling and chamfering.

Heating surfaces are PTFE coated. All tools have an on/off switch and a digital temperature display.

The standard SG160 includes a 110v power supply. 240v machines are available on request.



#### SG160 Combined Socket and Butt Fusion Tool

| Item             | Code  | Price          |
|------------------|-------|----------------|
| SG160 Complete * | SG160 | on application |

<sup>\*</sup> Machine includes electric planer, heating element, clamping device for butt fusion in sizes 32mm to 160mm, heating blocks for socket fusion in sizes 20mm to 110mm, and transportation case.

#### **Spares**

| Opures                                   |                |        |             |
|--|----------------|--------|-------------|
| Item                                     | Size (O.D. mm) | Code   | Price       |
| Heating block, non-stick coated, grey *  | 20             | HD020S |             |
| Heating block, non-stick coated, grey *  | 25             | HD025S |             |
| Heating block, non-stick coated, grey *  | 32             | HD032S |             |
| Heating block, non-stick coated, grey *  | 40             | HD040S |             |
| Heating block, non-stick coated, grey *  | 50             | HD050S |             |
| Heating block, non-stick coated, grey *  | 63             | HD063S |             |
| Heating block, non-stick coated, grey *  | 75             | HD075S |             |
| Heating block, non-stick coated, grey *  | 90             | HD090S | on          |
| Heating block, non-stick coated, grey *  | 110            | HD110S | application |
| Heating block, non-stick coated, green * | 20             | HD020  | ω,          |
| Heating block, non-stick coated, green * | 25             | HD025  |             |
| Heating block, non-stick coated, green * | 32             | HD032  |             |
| Heating block, non-stick coated, green * | 40             | HD040  |             |
| Heating block, non-stick coated, green * | 50             | HD050  |             |
| Heating block, non-stick coated, green * | 63             | HD063  |             |
| Heating block, non-stick coated, green * | 75             | HD075  |             |
| Heating block, non-stick coated, green * | 90             | HD090  |             |
| Heating block, non-stick coated, green * | 110            | HD110  |             |

<sup>\*</sup> Available inch sizes on request



#### **Tool Hire**

Many of our workshop or site welding tools are available for hire on a weekly basis. In most cases the hire includes welder training either on site or in our workshop by TWI certified CSWIP qualified welding professionals

To discuss machine hire or welder training contact Tony Charlton on tcharlton@ipsflowsystems.com

## workshop butt fusion tools

### Type 2500 Workshop Butt Fusion Tool

Suitable for PE, PP and PVDF

Size range from 50mm O.D. to 75mm O.D.

The Widos Type 2500 butt fusion welding machine will weld piping systems made from PE, PP or PVDF. The three standard machines will weld pipes in diameters from 50mm O.D. to 160mm O.D., 50mm O.D. to 250mm O.D., or 50mm O.D. to 315mm O.D. A special "Kombi" model is also available that provides butt fusion welding in pipe diameters from 50mm O.D. to 160mm O.D., and socket fusion welding in pipe diameters from 20mm O.D. to 125mm O.D.

The machine includes an electrically operated planer and electronic heating element. The clamping tool is divided into two parts (except for 160mm), each side swivelling up to 15° with clamping inserts and pipe support. This allows welding of segmented bends. A transport and mounting crate is available for safe, clean and protected storage.

The Type 2500 is a handy, mobile welding machine that is suitable for use on site as well as in the workshop. It is available for use with a 110v or 230v power supply - please specify with order.



#### **Butt Fusion Machines Type 2500**

| Item                       | Size (O.D. mm) | Code     | Price       |
|----------------------------|----------------|----------|-------------|
| Widos Type 2500 / OD 160 * | 50 - 160       | 38SV11N1 |             |
| Widos Type 2500 / OD 250 * | 50 - 250       | 38SV21N1 | on          |
| Widos Type 2500 / OD 315 * | 50 - 315       | 38SV01N1 | application |
| Transport case             |                | TK2500   |             |

<sup>\*</sup> Machine includes planer, heating element, basic clamping device, reducer inserts in sizes to suit the machine and prismatic pipe support. For component and accessory prices, please enquire.

### **Machine Hire**

Don't have the tools? We have a dedicated fleet of welding equipment available to hire on a weekly basis.



### Type 4001 Workshop Butt Fusion Tool

Suitable for PE, PP and PVDF

Sizes from 90mm to 315mm

The Widos Type 4001 is a rugged and reliable machine designed for welding polyolefine pipes in the size range from 90mm O.D. to 315mm O.D. An optional extension kit is available to increase the size range up to 450mm O.D.

A universal control lever with seperate pressure setting manage the electro-hydraulic welding forces, distances and speeds during the welding process. The planer includes a high torque electrical chain drive and exchangeable blades. Other features of this machine include external chip removal, an adjustable timer and a clamping device that swivels on each side up to 15° for the welding of segmented bends and fittings.

This bench machine can be ordered with an optional support frame if required, and is supplied complete with two carrying handles to assist portability. The hydraulic unit, planer, heating element and clamping tools can also be easily removed for transporting the machine. Other options include special tools to enable the production of tees and crosses, or the electronic weld log recorder SPA 600 which automatically documents all relevant welding parameters.



#### **Butt Fusion Machine Type 4001**

| Item                           | Size (O.D. mm) | Code     | Price       |
|--------------------------------|----------------|----------|-------------|
| Widos Type 4001 (110v / 1300w) | 90 - 315       | 0241110  | on          |
| Conversion kit to 450mm *      | 90 - 450       | 02410110 | application |
| Steel support frame            |                | 024101   | app.        |

<sup>\*</sup> Kit includes basic machine with hydraulics but without planer and basic clamping device. For component and accessory prices, please enquire.

### Type 4002 Workshop Butt Fusion Tool

Suitable for PE, PP and PVDF

Sizes from 90mm to 315mm

The Widos Type 4002 is a rugged and reliable machine designed for welding polyolefine pipes in the size range from 90mm O.D. to 315mm O.D. An optional extension kit is available to increase the size range up to 450mm O.D.

A universal control lever with seperate pressure setting manage the electro-hydraulic welding forces, distances and speeds during the welding process. The planer includes a high torque electrical chain drive and exchangeable blades. Other features of this machine include external chip removal, an adjustable timer and a clamping device that swivels on each side up to 15° for the welding of segmented bends and fittings.

This machine is supplied fitted to a heavy duty support frame, and is complete with two carrying handles to assist portability. The hydraulic unit, planer, heating element and clamping tools can also be easily removed for transporting the machine. Other options include special tools to enable the production of tees and crosses, or the electronic weld log recorder SPA 600 which automatically documents all relevant welding parameters. CNC control may be included for semi-automatic operation and high levels of control.



### **Butt Fusion Machine Type 4002**

| Butt I usion Muonine Type 4002                       |                |           |             |
|--|----------------|-----------|-------------|
| Item   | Size (O.D. mm) | Code      | Price       |
| Widos Type 4002 (110v / 1300w)                       | 90 - 315       | 0231110   |             |
| Conversion kit to 450mm *                            | 90 - 450       | 02310110  | on          |
| Widos Type 4002 with SPA 600 recorder (110v / 1300w) | 90 - 315       | 0231110SP | application |
| Widos Type 4002 S CNC (110v / 1300w)                 | 90 - 315       | 1720110   |             |

<sup>\*</sup> Kit includes basic machine with hydraulics but without planer and basic clamping device. For component and accessory prices, please enquire.

### **Miniplast 2 Portable Butt Fusion Tool**

✓ Suitable for PE, PP and PVDF

✓ Size range from 20mm O.D. to 110mm O.D.

Highly portable device

The Widos Miniplast 2 is a butt welding machine for PE, PP and PVDF pipes and fittings in diameters from 20mm O.D. to 110mm O.D. It is lightweight and compact.

The special design of this machine makes it suitable for welding in confined spaces where other machines would be unsuitable.

The basic machine has two large aluminium basic clamping tools which swivel up to 15° on each side for the fabrication of segmented bends. By screwing in 4 small reduction inserts, clamping is possible on smaller diameters. For fittings with short legs, a small fitting clamping tool is available. The light



and compact manual planer is ratchet operated (electric option), and the electronically controlled heating element is accordance with DVS 2208.

A steel carry case and heat-protected box for the planer and heating element is included when the complete machine is purchased. It is available for use with a 110v or 230v power supply - please specify with order.

#### **Miniplast 2 Butt Fusion Machine**

| Item                   | Size (O.D. mm) | Code     | Price       |
|------------------------|----------------|----------|-------------|
| Widos Miniplast 2 *    | 20 - 110       | 45SVMIN1 | on          |
| Electric planer (110v) |                | 4504110  | application |
| Electric planer (230v) |                | 4504230  | api         |

<sup>\*</sup> Machine includes table support, ratchet planer, heating element, clamping device for 110mm with reducer inserts in sizes 20mm to 90mm, heat protected box and steel carry case. For component and accessory prices, please enquire.

### **Maxiplast Portable Butt Fusion Tool**

- Suitable for PE, PP and PVDF
- Size range from 50mm O.D. to 160mm O.D.
- Highly portable device

The Widos Maxiplast is a butt welding machine for PE, PP and PVDF pipes and fittings in diameters from 50mm O.D. to 160mm O.D. It is lightweight and compact.

The special design of this machine makes it suitable for welding in confined spaces where other machines would be unsuitable.

The basic machine has two large aluminium basic clamping tools which swivel up to 15° on each side for the fabrication of segmented bends. By using reduction inserts, clamping is possible on smaller diameters. The compact planer is electrically

operated, and the electronically controlled heating element is accordance with DVS 2208.

A transportation case and heat-protected box for the planer and heating element is included when the complete machine is purchased. It is available for use with a 110v or 230v power supply - please specify with order.

#### **Maxiplast Butt Fusion Machine**

| Item              | Size (O.D. mm) | Code    | Price          |
|-------------------|----------------|---------|----------------|
| Widos Maxiplast * | 50 - 160       | 45SVMAX | on application |

\* Machine includes table support, electric planer, heating element, clamping device with reducer inserts in sizes 50mm to 140mm, heat protected box and transportation case. For component and accessory prices, please enquire.

#### **Proxima Centaur Electrofusion Machine**

- Suitable for PE and PP fittings up to 48v
- Welding process is monitored throughout
- Barcode or manual entry
- Simple to operate
- Robust yet easy to handle
- Level 3 Maxifuse Proxima Centaur electrofision processor
- Available for use with either 110 or 230 volt A.C. supplies
- Fusion times input manually, by reading barcode
- Detachable fitting supply chord with military plug & socket and choice of 4.0 or 4.7mm fittings connector plugs
- Output voltage level user selectable 10-48 in manual mode
- Optional operative ID card recognition and lock out for restricting unqualified users
- Optional ability to accept additional information on the joint, e.g. batch no etc.
- Confirmation the joint was scraped and clamped
- · Bar code reader option and manual override
- USB port to download weld data
- Optional control function to restrict welder activities e.g. jointing up to 180mm, from 180-355mm & 355mm
- Multilingual display



Operating mode: Manual Time Entry

Bar Code Entry

GPS location: Available on Request

Data log memory: 702 welds

Memory download: USB Flash Disc

Languages: English (others available on request)

Input voltage: 110v ac (88 to 132) or

240v ac (184 to 276)

Input frequency: 50 Hz (40 to 70)

Input current: 1 A to 30 A with 110v input

1 A to 14 A with 240v input Input power: 110 VA to 3300 VA (apparent)

Power factor: Apparent 0.72

Output voltage: 39.5v ac true rms (default 40v mode)

(10 to 48v ac selectable in 40v manual

mode)

(8 to 48v ac in barcode mode)

Output stability: +/- 1.5%

Output current: 1 A to 60 A (continuous)

Output power: 40w to 2370w Operating temp: -10°C to +40°C

Weight: 22.6kg (excluding output leads)

Dimentions: 38.5 x 27.5 x 21.5cm

Protection level: IP54

Protection class: Class 1 (equipment must be earthed)

### Information display:

All the welding information and entered data is shown here. The display is permanently illuminated and is visible in all light conditions.

#### **USB** data port:

The USB data port allows connection to a USB memory device for downloading the weld information records. With a barcode reader wand or scanner connected to the USB data port the capability of performing full barcode welding is enabled.

#### Start button:

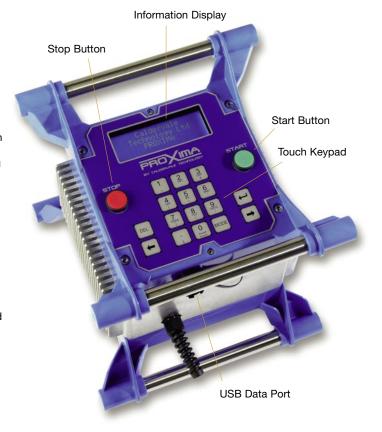
Used to start the welding cycle also used in entering weld information.

#### Stop button:

Used to stop the welding cycle also used in entering weld information.

#### Keypad:

Used for entering weld information. Designed to withstand harsh site environments.



### site butt fusion tools

### Type 4400/4600/4900 Site Butt Fusion Tool

- ✓ Suitable for PE, PP and PVDF
- √ Type 4400 size range from 50mm O.D. to 160mm O.D.
- √ Type 4600 size range from 75mm O.D. to 250mm O.D.
- Type 4900 size range from 90mm O.D. to 315mm O.D.
- Can be retro-fitted with SPA weld log recorder
- CNC version available

The Widos Types 4400/4600/4900 are butt welding machines for PE, PP and PVDF pipes and fittings that have been designed for rugged use on construction sites and in trenches.

The machine has a double clamping device with quick clamping on the fixed and on the movable side guided by two hydraulic cylinders. There are two flexible hoses with quick-action couplings for connection to the hydraulic control unit. The double clamping devices are screwed to the steel pipe frame. The outer fixed clamping tool can be easily dismounted to enable welding in places of poor accessability.

The electro-hydraulic unit (for moving the right-hand clamping device and for the exact control of the welding forces) has a pressure backup for supporting the welding force during the cooling period, two quick-action couplings as well as a digital pressure gauge.

The planer is suspended in the guide shafts, has a chain drive in a closed aluminium housing, a security micro switch with lock and an automatic external chip removal.

The heating element is suspended in the guide shafts and is anti-stick coated. It has an electronic temperature control with digital display, control lamps, an on/off switch and a

connection cable with shock-proof plug. The heat-separating device prevents the heating element from sticking to the pipe after the heating process.

The Widos 4400, 4600 and 4900 welding machines can easily be retrofitted with the Widos SPA weld log recorder and

can also be supplied in CNC controlled version. Automatic movement of the heating element is also an option. The machines are supplied with a transportation case and are available for use with a 110v or 230v power supply - please specify with order. **Butt Fusion Machine Type 4400** 



| Item  | Size (O.D. mm) | Code     | Price       |
|---|----------------|----------|-------------|
| Widos Type 4400 with 160mm clamping device *        | 50 - 160       | 16SV44N1 |             |
| Widos Type 4400 SPA600 with 160mm clamping device * | 50 - 160       | 62SV44S1 | on          |
| Widos Type 4400 CNC3.0 with 160mm clamping device * | 50 - 160       | 62SV44C1 | application |
| Reducer inserts, set 50mm - 140mm                   |                | 16VS140  |             |
| * D   |                |          |             |

<sup>\*</sup> Reducer inserts not included

#### **Butt Fusion Machine Type 4600**

| Item  | Size (O.D. mm) | Code     | Price       |
|---|----------------|----------|-------------|
| Widos Type 4600 with 250mm clamping device *        | 75 - 250       | 09SV46N1 |             |
| Widos Type 4600 SPA600 with 250mm clamping device * | 75 - 250       | 09SV46S1 | on          |
| Widos Type 4600 CNC3.0 with 250mm clamping device * | 75 - 250       | 61SV46C1 | application |
| Reducer inserts, set 75mm - 225mm                   |                | 09VS225  |             |

<sup>\*</sup> Reducer inserts not included

### **Butt Fusion Machine Type 4900**

| Item  | Size (O.D. mm) | Code     | Price       |
|---|----------------|----------|-------------|
| Widos Type 4900 with 315mm clamping device *        | 90 - 315       | 21SV49N1 |             |
| Widos Type 4900 SPA600 with 315mm clamping device * | 90 - 315       | 21SV49S1 | on          |
| Widos Type 4900 CNC3.0 with 315mm clamping device * | 90 - 315       | 63SV49C1 | application |
| Reducer inserts, set 90mm - 280mm                   |                | 21VS280  |             |

Reducer inserts not included







### Type 5100/5500/6100 Site Butt Fusion Tool

- Suitable for PE, PP and PVDF
- √ Type 5100 size range from 200mm O.D. to 450mm O.D.
- **▼** Type 5500 size range from 200mm O.D. to 500mm O.D.
- Type 6100 size range from 315mm O.D. to 630mm O.D.
- Can be retro-fitted with SPA weld log recorder
- CNC version available

The Widos Types 5100/5500/6100 are butt welding machine for PE, PP and PVDF pipes and fittings that have been designed for rugged use on construction sites and in trenches.

The machine has a double clamping device with quick clamping on the fixed and on the movable side guided by two hydraulic cylinders. There are two flexible hoses with quick-action couplings for connection to the hydraulic control unit. The double clamping devices are screwed to the steel pipe frame. The outer fixed clamping tool can be easily dismounted to enable welding in places of poor accessability.

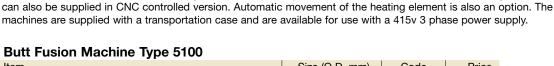
The electro-hydraulic unit (for moving the right-hand clamping device and for the exact control of the welding forces) has a pressure backup for supporting the welding force during the cooling period, two quickaction couplings as well as a digital pressure gauge.

The planer is suspended in the guide shafts, has a chain drive in a closed aluminium housing, a security micro switch with lock and an automatic external chip removal.

The heating element is suspended in the guide shafts and is anti-stick coated. It has an electronic temperature control with digital display, control lamps, an on/off switch and a connection cable with shock-pro-

control lamps, an on/off switch and a connection cable with shock-proof plug. The heat-separating device prevents the heating element from sticking to the pipe after the heating process.

The Widos 5100, 5500 and 6100 welding machines can easily be retrofitted with the Widos SPA weld log recorder and



| Item  | Size (O.D. mm) | Code     | Price       |
|---|----------------|----------|-------------|
| Widos Type 5100 with 450mm clamping device *        | 200 - 450      | 07SV51N1 |             |
| Widos Type 5100 SPA600 with 450mm clamping device * | 200 - 450      | 07SV51S1 | on          |
| Widos Type 5100 CNC3.0 with 450mm clamping device * | 200 - 450      | 64SV51C1 | application |
| Reducer inserts, set 200mm - 400mm                  |                | 07VS400  |             |

<sup>\*</sup> Reducer inserts not included

#### **Butt Fusion Machine Type 5500**

| Item  | Size (O.D. mm) | Code     | Price       |
|---|----------------|----------|-------------|
| Widos Type 5500 with 500mm clamping device *        | 200 - 500      | 39SV55N1 |             |
| Widos Type 5500 SPA600 with 500mm clamping device * | 200 - 500      | 09SV46S1 | on          |
| Widos Type 5500 CNC3.0 with 500mm clamping device * | 200 - 500      | 39SV55C1 | application |
| Reducer inserts, set 200mm - 450mm                  |                | 39VS450  |             |

<sup>\*</sup> Reducer inserts not included

#### **Butt Fusion Machine Type 6100**

| Item  | Size (O.D. mm) | Code     | Price       |
|---|----------------|----------|-------------|
| Widos Type 6100 with 630mm clamping device *        | 315 - 630      | 08SV61N1 |             |
| Widos Type 6100 SPA600 with 630mm clamping device * | 315 - 630      | 08SV61S1 | on          |
| Widos Type 6100 CNC3.0 with 630mm clamping device * | 315 - 630      | 65SV61C1 | application |
| Reducer inserts, set 315mm - 560mm                  |                | 08VS560  | . ,         |

<sup>\*</sup> Reducer inserts not included







## advanced welding systems

# for AGRU high purity piping systems



#### **AGRU SP Series IR Fusion**

#### **FULLY AUTOMATED WELDING OPERATION**

All welding parameters are recorded by the computer. By means of a touch-screen, all steps are controlled and sequential.

#### **OPERATOR CONTROL**

Use of the machine is controlled by PCMCIA cards which also double as storage discs for downloading of welding data from the computer's memory. Historical welding information can be recalled at any time and displayed on screen, simplifying traceability.

#### THE FUSION PROCESS

The computer will control pressure, temperature, heating time and cooling time according to pre-programmed welding parameters which meet the requirements of DVS.

#### **CLAMPING TOOLS**

The clamping tools are equipped with a new and unique closing device which ensures uniform and repeatable clamping pressure.

#### **HEATING ELEMENT**

The heating element is produced from a special alloy which is controlled and automatically changed to compensate for the smallest temperature changes.

#### SUITABLE FOR CLEAN ROOM USE

(Class 100 and less)

All surfaces are specially heated and coated to protect against particle generation. Motors and actuators are encapsulated, and guiding devices are free of oil and are fully covered. Records of each weld are printed onto a special thermal printer onto a thermoplastic label which resists IPA.

#### **POWER SUPPLY**

Special voltage limiting circuits are included so that the machine is insensitive to spikes. If the voltage is incorrect, it is visible on the touch-screen.

### WIDE SIZE RANGE

The SP110S machine welds 20mm to 110mm. The SP315S machine welds 75mm to 315mm.

#### Agru SP110S IR Fusion

- **V** Suitable for welding PP, PVDF, PFA and ECTFE
- Size range 20mm to 110mm
- Infra Red (IR) heating element
- Fully automatic welding
- **Touch screen controls**
- PCMCIA code card included
- Optional thermolabel printer
- Optional nitrogen purge

### **Agru SP315S IR Fusion**

- Suitable for welding PP, PVDF, PFA and ECTFE
- √ Size range 75mm to 250mm
- Infra Red (IR) heating element
- Fully automatic welding
- ✓ Touch screen controls
- ✓ PCMCIA code card included
- Optional thermolabel printer
- Optional nitrogen purge



Agru SP110S computer controlled IR welding machine



Highly reproduceable accurate weld beads Printed labels give weld traceability



Touch screen computer control displays live welding parameters





# advanced welding systems



# beadless welding technology



#### AGRU SP110-B

#### Bead and crevice free welding

SP110-B welding equipment enables beadless fusion with smooth inner bore and outer surface in the welding area.

During the fully automated fusion process the temperature, pressure and time are accurately regulated and documented. This beadless welding technology offers highest quality joints with excellent reproducibility.

Primarily designed for use with PVDF from 20mm od to 63mm od, the SP110-B is also suitable for use with PP material in the same dimensions.

For full details on this new technology please contact Tony Charlton or Tom Tate on 0191 521 3111.



### **Agru HPF Electrofusion**

- Suitable for welding AGRU PVDF
- HPF sleeves can be used with all AGRU PVDF pipes and fittings
- 🚺 Size range 20mm to 63mm
- Fully automatic barcoded welding system
- Ideal for final remote tie in welds
- Can be supplied with silicon balloon for high purity welding
- Optional long cables for welding in remote locations

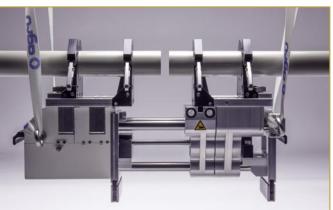


# remote IR welding technology



### **AGRU SP63-M**

- ✓ Suitable for welding PP, PVDF, PFA and ECTFE
- Compact design for tight spaces
- Size range 20mm to 63mm
- Infra Red (IR) heating element
- Fully automatic welding
- Automated clamp movement and control
- Complete with label printer



#### Ideal for final remote tie in welds

When operating in confined spaces the clamping mechanism can be removed for direct attachment to the pipe. However full support is required to ensure correct alignment.

Once in position welding can be carried out using the standard infra red (IR) welding process.

For full details on this new technology please contact Tony Charlton or Tom Tate on 0191 521 3111.